

CLAIMS

1. A method of generating specific elements (F) having characteristics different from those of the majority of the generic elements (E_G) of an image, characterized in that the generation of these specific elements (F) is performed independently of the generation of the generic elements (E_G) of the image.
2. The method of generating specific elements (F) as claimed in the preceding claim, characterized in that it includes the determination (23) of the impact of these generic elements (E_G) on the specific elements (F).
3. The method of generating specific elements (F) as claimed in the preceding claim, characterized in that the determination of the impact on the specific elements (F) includes, for each specific element (F):
 - the classification of the generic elements (E_G) as generic elements (E_G) to be tested if these generic elements (E_G) are contained by a subdivision of the vision pyramid defined by the observation point including the specific element,
 - the determination of the generic elements (E_G) having an impact on at least one specific element by scanning through all the generic elements (E_G) to be tested in order to determine if one of these generic elements (E_G) is intersected by the straight line passing through the observation point and the specific element,
 - the computation of the impact on the specific element from the generic element determined as having an impact.

4. The method of generating specific elements (F) as claimed in the preceding claim, characterized in that the classification and the determination of the generic elements (E_G) having an impact are performed asynchronously, and in that the computation of the impact is performed synchronously.
5. The method of generating specific elements (F) as claimed in either of claims 3 or 4, characterized in that the impact consists of a total or partial masking, or of an atmospheric effect, or of a reflection.
6. The method of generating specific elements (F) as claimed in any one of claims 2 to 5, characterized in that it includes:
 - the extraction of the N-dimensional coordinates (N being an integer greater than or equal to 3) of the specific elements (F) and of the generic elements (E_G), from an observation point provided $P_o(t)$ and a visual database (B),
 - the determination of the impact (23) from the extracted coordinates,
 - the conversion (22) of the coordinates of the specific elements (F) into a predetermined M-dimensional format (M being an integer greater than or equal to 2),
 - the association (24) with these M-dimensional coordinates of the determined impact, providing coordinates and generation characteristics of the specific elements $C_F(t)$.
7. The method of generating specific elements (F) as claimed in any one of the preceding claims, characterized in that the specific elements (F) correspond to the elements displayed in a calligraphic mode and the generic elements (E_G)

correspond to the elements displayed in a TV mode.

8. A device for generating specific elements (F) implementing the method of generating specific elements (F) as claimed in any one of claims 1 to 7, characterized in that it includes means (23) of determining the impact of the generic elements (E_G) on the specific elements (F).
9. A method of generating overall images including specific elements (F) having characteristics different from those of the majority of the generic elements (E_G) of the images, characterized in that it includes:
 - on a first channel (10):
 - extraction (11) of the N-dimensional coordinates (N being an integer greater than or equal to 3) of the generic elements (E_G), from the observation point provided $P_o(t)$ and a visual database (B),
 - the computation (12) of the 2D image according to the generic coordinates (E_G) extracted;
 - on a second channel (20), the method of generating specific elements (F) of any one of claims 1 to 7.
10. A device for generating overall images including:
 - on a first channel, means (10) of generating generic elements (E_G) implementing the extraction (11) of the generic elements (E_G) and the computation (12') of the 2D image of the method of generating overall images of claim 9;
 - on a second channel, the device for generating specific elements (20) as claimed in claim 8.
11. The device for generating overall images as claimed in the preceding claim, characterized in that it includes at least one first processor including means (20) of generating specific

elements (F) that can be interfaced with at least one projector via an electronic card, said first processor including said card.

- 5 12. The generation device as claimed in the preceding claim, characterized in that it includes a second processor including means (10) of generating generic elements (E_G).
- 10 13. The generation device as claimed in claim 11, characterized in that said first processor also includes the means (10) of generating generic elements (E_G).
- 15 14. A flight simulator, characterized in that it includes a device for generating overall images as claimed in any one of claims 8 and 10 to 13.